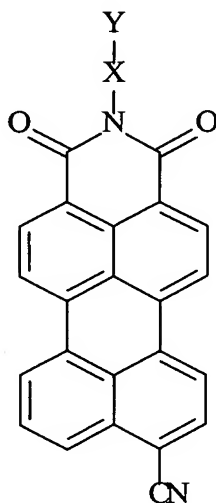


## IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A 9-cyano-substituted perylene-3,4-dicarboxylic monoimide of the general formula I



I

where the variables are defined as follows:

X is a chemical bond;

C<sub>1</sub>-C<sub>30</sub>-alkylene whose carbon chain may be ~~interrupted~~ interrupted by one or more -O-, -S-, -NR<sup>1</sup>-, -CO- and/or -SO<sub>2</sub>- moieties, and which may be substituted by -COOR<sup>1</sup>, -SO<sub>3</sub>R<sup>1</sup>, cyano, C<sub>1</sub>-C<sub>6</sub>-alkoxy, aryl which may be substituted by C<sub>1</sub>-C<sub>18</sub>-alkyl and/or C<sub>1</sub>-C<sub>6</sub>-alkoxy, and/or be mono- or polysubstituted by a 5- to 7-membered heterocyclic radical which is bonded via a nitrogen atom and may contain further heteroatoms and be aromatic;

C<sub>5</sub>-C<sub>8</sub>-cycloalkylene whose carbon framework may be interrupted by one or more -O-, -S-, -NR<sup>1</sup>-, -CO- and/or -SO<sub>2</sub>- moieties and/or may be mono- or polysubstituted by C<sub>1</sub>-C<sub>12</sub>-alkyl, -COOR<sup>1</sup>, -SO<sub>3</sub>R<sup>1</sup>, cyano and/or C<sub>1</sub>-C<sub>6</sub>-alkoxy;

arylene or hetarylene, each of which may be mono- or polysubstituted by C<sub>1</sub>-C<sub>18</sub>-alkyl, C<sub>1</sub>-C<sub>6</sub>-alkoxy, cyano, -COOR<sup>1</sup>, -SO<sub>3</sub>R<sup>1</sup>, -CONH-R<sup>1</sup> and/or -NH-COR<sup>1</sup>;

C<sub>1</sub>-C<sub>20</sub>-alkylarylene or -hetarylene whose alkylene group may in each case be interrupted by one or more -O-, -S-, -NR<sup>1</sup>-, -CO- and/or -SO<sub>2</sub>- moieties and which may in each case be mono- or polysubstituted by -COOR<sup>1</sup>, -SO<sub>3</sub>R<sup>1</sup>, -CONHR<sup>1</sup>, -NHCOR<sup>1</sup>, cyano, C<sub>1</sub>-C<sub>18</sub>-alkyl, C<sub>1</sub>-C<sub>6</sub>-alkoxy and/or a 5- to 7-membered heterocyclic radical which is bonded via a nitrogen atom and may contain further heteroatoms and be aromatic;

aryl- or hetaryl-C<sub>1</sub>-C<sub>20</sub>-alkylene, whose alkylene group may in each case be interrupted by one or more -O-, -S-, -NR<sup>1</sup>-, -CO- and/or -SO<sub>2</sub>- moieties and which may each be mono- or polysubstituted by -COOR<sup>1</sup>, -SO<sub>3</sub>R<sup>1</sup>, -CONHR<sup>1</sup>, -NHCOR<sup>1</sup>, cyano, C<sub>1</sub>-C<sub>18</sub>-alkyl, C<sub>1</sub>-C<sub>6</sub>-alkoxy and/or a 5- to 7-membered heterocyclic radical which is bonded via a nitrogen atom and may contain further heteroatoms and be aromatic;

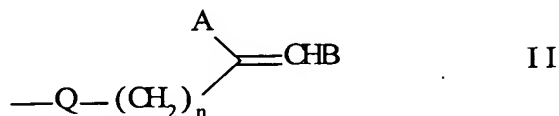
Y is a functional group Y' or a polymerizable group P;

or

X-Y together is an R radical;

Y' is amino, hydroxyl, -COOH, -SO<sub>3</sub>H, chlorine or bromine;

P is a radical of the general formula II



A, B are each independently hydrogen, C<sub>1</sub>-C<sub>6</sub>-alkyl or phenyl, or are together a cyclopentene or cyclohexene ring which contains the double bond to which A and B are bonded;

Q is a chemical bond;  
an -O-, -NR<sup>2</sup>-, -S-, -OCO-, -OCOO-, -OCONR<sup>3</sup>-, -NR<sup>3</sup>CO-, -NR<sup>3</sup>COO-,  
-NR<sup>3</sup>CONR<sup>4</sup>-, -CO-, -COO-, -CONR<sup>3</sup>-, -SO<sub>2</sub>-O-, -SO<sub>2</sub>NR<sup>3</sup>-, -O-SO<sub>2</sub>- or  
-NR<sup>3</sup>SO<sub>2</sub>- moiety;

n is 0, 1, 2 or 3;

R is hydrogen;  
C<sub>1</sub>-C<sub>30</sub>-alkyl whose carbon chain may be interrupted by one or more -O-, -S-,  
-NR<sup>1</sup>-, -CO- and/or -SO<sub>2</sub>- moieties, and which may be substituted by cyano,  
C<sub>1</sub>-C<sub>6</sub>-alkoxy, aryl which may be substituted by C<sub>1</sub>-C<sub>18</sub>-alkyl and/or C<sub>1</sub>-C<sub>6</sub>-  
alkoxy, and/or be mono- or polysubstituted by a 5- to 7-membered  
heterocyclic radical which is bonded via a nitrogen atom and may contain  
further heteroatoms and be aromatic;  
C<sub>5</sub>-C<sub>8</sub>-cycloalkyl whose carbon framework may be interrupted by one or more  
-O-, -S- and/or -NR<sup>1</sup>- moieties and/or may be mono- or polysubstituted by C<sub>1</sub>-  
C<sub>6</sub>-alkyl;  
aryl or hetaryl, each of which may be mono- or polysubstituted by C<sub>1</sub>-C<sub>18</sub>-  
alkyl, C<sub>1</sub>-C<sub>6</sub>-alkoxy, cyano, -CONHR<sup>5</sup>, -NHCOR<sup>5</sup> and/or aryl- or hetarylazo,  
each of which may be substituted by C<sub>1</sub>-C<sub>10</sub>-alkyl, C<sub>1</sub>-C<sub>6</sub>-alkoxy and/or cyano;

R<sup>1</sup> is hydrogen or C<sub>1</sub>-C<sub>6</sub>-alkyl;

R<sup>2</sup> is hydrogen, C<sub>1</sub>-C<sub>6</sub>-alkyl, aryl, aryl-C<sub>1</sub>-C<sub>6</sub>-alkyl, C<sub>1</sub>-C<sub>6</sub>-alkylcarbonyl,  
arylcarbonyl or formyl;

R3, R4 are each independently hydrogen; C<sub>1</sub>-C<sub>6</sub>-alkyl; aryl or aryl-C<sub>1</sub>-C<sub>6</sub>-alkyl, each of which may be substituted by hydroxyl, halogen, C<sub>1</sub>-C<sub>6</sub>-alkyl and/or C<sub>1</sub>-C<sub>6</sub>-alkoxy;

R5 is hydrogen; C<sub>1</sub>-C<sub>18</sub>-alkyl; aryl or hetaryl, each of which may be substituted by C<sub>1</sub>-C<sub>6</sub>-alkyl, C<sub>1</sub>-C<sub>6</sub>-alkoxy, halogen, hydroxyl, carboxyl and/or cyano.

Claim 2 (Original): A perylene-3,4-dicarboxylic monoimide of the general formula I as claimed in claim 1, in which the variables are defined as follows:

X is C<sub>1</sub>-C<sub>30</sub>-alkylene, whose carbon chain may be interrupted by one or more -O- and/or -CO- moieties, and which may be substituted by -COOR<sup>1</sup>, cyano, C<sub>1</sub>-C<sub>6</sub>-alkoxy and/or aryl which may be substituted by C<sub>1</sub>-C<sub>18</sub>-alkyl and/or C<sub>1</sub>-C<sub>6</sub>-alkoxy;  
C<sub>5</sub>-C<sub>8</sub>-cycloalkylene which may be mono- or polysubstituted by C<sub>1</sub>-C<sub>12</sub>-alkyl, -COOR<sup>1</sup>, cyano and/or C<sub>1</sub>-C<sub>6</sub>-alkoxy;  
arylene or hetarylene, each of which may be mono- or polysubstituted by C<sub>1</sub>-C<sub>18</sub>-alkyl, C<sub>1</sub>-C<sub>6</sub>-alkoxy, cyano, -COOR<sup>1</sup>, -CONH-R<sup>1</sup> and/or -NHCOR<sup>1</sup>;  
C<sub>1</sub>-C<sub>20</sub>-alkylarylene or -hetarylene whose alkylene group may in each case be interrupted by one or more -O- and/or -CO- moieties and which may in each case be mono- or polysubstituted by -COOR<sup>1</sup>, cyano, C<sub>1</sub>-C<sub>18</sub>-alkyl and/or C<sub>1</sub>-C<sub>6</sub>-alkoxy;  
aryl- or hetaryl-C<sub>1</sub>-C<sub>20</sub>-alkylene, whose alkylene group may in each case be interrupted by one or more -O- and/or -CO- moieties and which may in each case be mono- or polysubstituted by -COOR<sup>1</sup>, cyano, C<sub>1</sub>-C<sub>18</sub>-alkyl and/or C<sub>1</sub>-C<sub>6</sub>-alkoxy;

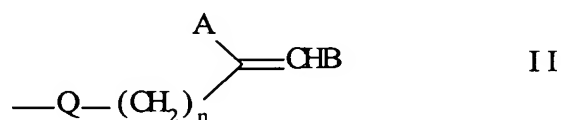
Y is a functional group Y' or a polymerizable group P;

or

X-Y together is an R radical;

Y' is amino, hydroxyl, -COOH or bromine;

P is a radical of the general formula II



A, B are each independently hydrogen, C<sub>1</sub>-C<sub>6</sub>-alkyl or phenyl, or are together a cyclopentene or cyclohexene ring which contains the double bond to which A and B are bonded;

Q is a chemical bond;

a -O-, -NR<sup>2</sup>-, -OCO-, -NR<sup>3</sup>CO-, -COO- or -CONR<sup>3</sup>-moiety;

n is 0, 1, 2 or 3;

R is hydrogen;

C<sub>1</sub>-C<sub>30</sub>-alkyl whose carbon chain may be interrupted by one or more -O-, -NR<sup>1</sup>- and/or -CO- moieties, and which may be substituted by cyano, C<sub>1</sub>-C<sub>6</sub>-alkoxy, aryl which may be substituted by C<sub>1</sub>-C<sub>18</sub>-alkyl and/or C<sub>1</sub>-C<sub>6</sub>-alkoxy, and/or be mono- or polysubstituted by a 5- to 7-membered heterocyclic radical which is bonded via a nitrogen atom and may contain further heteroatoms and be aromatic;

C<sub>5</sub>-C<sub>8</sub>-cycloalkyl whose carbon framework may be interrupted by one or more -O- and/or -NR<sup>1</sup>- moieties and/or may be mono- or polysubstituted by C<sub>1</sub>-C<sub>6</sub>-alkyl;

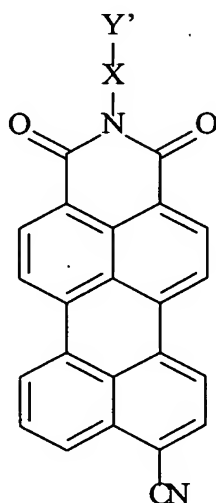
aryl or hetaryl, each of which may be mono- or polysubstituted by C<sub>1</sub>-C<sub>18</sub>-alkyl, C<sub>1</sub>-C<sub>6</sub>-alkoxy, cyano and/or aryl- or hetarylazo, each of which may be substituted by C<sub>1</sub>-C<sub>10</sub>-alkyl, C<sub>1</sub>-C<sub>6</sub>-alkoxy and/or cyano;

R<sup>1</sup> is hydrogen or C<sub>1</sub>-C<sub>6</sub>-alkyl;

R<sup>2</sup> is hydrogen, C<sub>1</sub>-C<sub>6</sub>-alkyl, aryl, aryl-C<sub>1</sub>-C<sub>6</sub>-alkyl;

R<sup>3</sup> is hydrogen; C<sub>1</sub>-C<sub>6</sub>-alkyl; aryl or aryl-C<sub>1</sub>-C<sub>6</sub>-alkyl, each of which may be substituted by hydroxyl, C<sub>1</sub>-C<sub>6</sub>-alkyl and/or C<sub>1</sub>-C<sub>6</sub>-alkoxy.

Claim 3 (Original): A process for preparing perylene-3,4-dicarboxylic monoimides of the general formula Ia



Ia

where X and Y' are as defined in claim 1 or X-Y' together are one of the R radicals defined in claim 1, which comprises

- a) brominating perylene-3,4-dicarboxylic anhydride in the 9-position using elemental bromine in concentrated sulfuric acid or an aliphatic monocarboxylic acid,
- b) reacting the 9-bromoperylene-3,4-dicarboxylic anhydride obtained in step a) with copper(I) cyanide in excess in a high-boiling inert diluent, optionally with

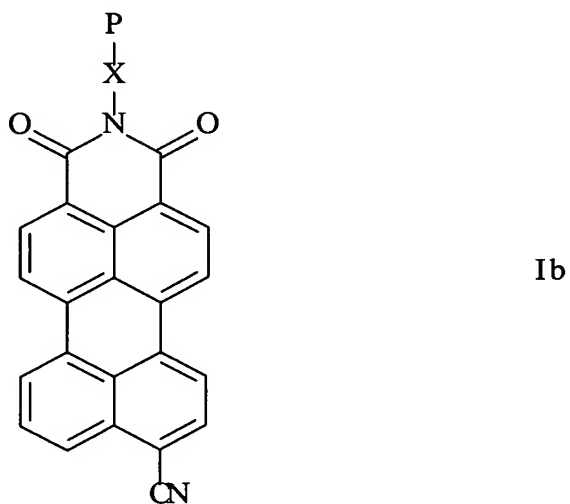
the addition of a basic nitrogen compound or of a nitrogen heterocycle as a catalyst, and

- c) reacting the 9-cyanoperylene-3,4-dicarboxylic anhydride obtained in step b) with a primary amine of the general formula IV

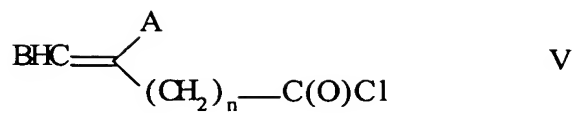


in water or an inert organic solvent, optionally with the addition of an imidation catalyst, to give the desired 9-cyanoperylene-3,4-dicarboxylic monoimide of the formula Ia.

Claim 4 (Original): A process for preparing perylene-3,4-dicarboxylic monoimides of the general formula Ib

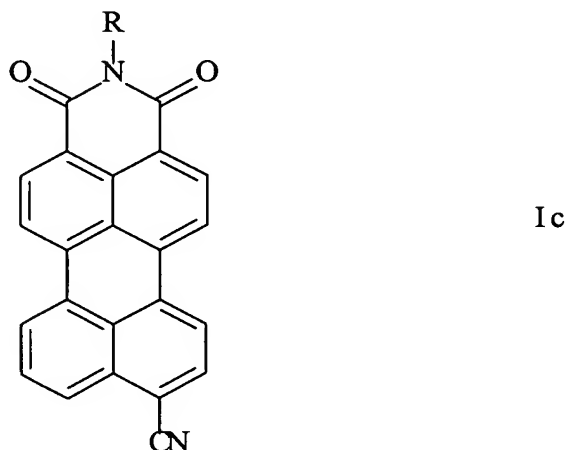


where X is as defined in claim 1 and P is one of the radicals of the formula II defined in claim 1 where Q is -OCO- or -NHCO-, which comprises reacting a perylene-3,4-dicarboxylic monoimide of the formula Ia as defined in claim 3 where Y' is amino or hydroxyl with a carbonyl chloride of the general formula V



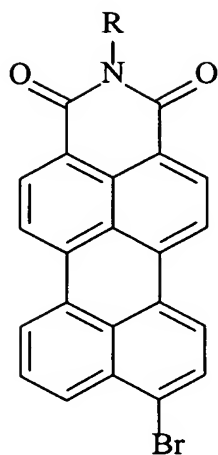
where the variables are as defined in claim 1 in an inert aprotic diluent, with the addition of a nitrogen base.

Claim 5 (Original): A process for preparing perylene-3,4-dicarboxylic monoimides of the general formula Ic



where R is as defined in claim 1, which comprises converting a 9-bromoperylene-3,4-dicarboxylic monoimide of the general formula VI

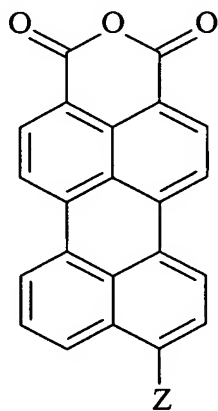




VI

to the desired 9-cyanoperylene-3,4-dicarboxylic monoimide of the formula Ic by reacting with copper(I) cyanide without a diluent or in a high-boiling inert diluent, optionally with the addition of a basic nitrogen compound or of a nitrogen heterocycle as a catalyst.

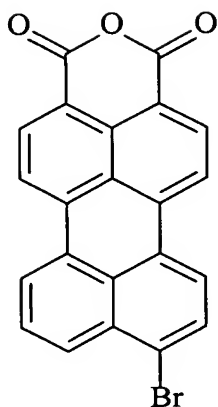
Claim 6 (Original): A perylene-3,4-dicarboxylic anhydride, substituted in the 9-position, of the general formula III



III

where Z is bromine or cyano.

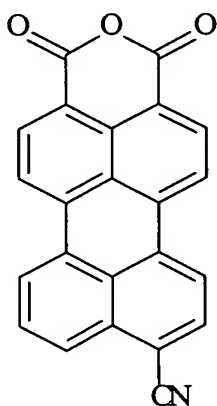
Claim 7 (Original): A process for preparing 9-bromoperylene-3,4-dicarboxylic anhydride of the formula IIIa



IIIa

which comprises selectively brominating perylene-3,4- dicarboxylic anhydride in the 9-position with elemental bromine in concentrated sulfuric acid or an aliphatic monocarboxylic acid.

Claim 8 (Original): A process for preparing 9-cyanoperylene-3,4-dicarboxylic anhydride of the formula IIIb



IIIb

which comprises reacting 9-bromoperylene-3,4-dicarboxylic anhydride with copper(I) cyanide in excess in a high-boiling inert diluent, optionally with the addition of a basic nitrogen compound or of a nitrogen heterocycle as a catalyst.

Claim 9 (Currently Amended): ~~The use of 9-cyano-substituted perylene-3,4-dicarboxylic monoimides of the general formula I as claimed in claim 1 or 2~~ A method for coloring high molecular weight organic and inorganic materials comprising utilizing the 9-cyano-substituted perylene-3,4-dicarboxylic monoimides of the general formula I as claimed in claim 1 as a colorant.

Claim 10 (Currently Amended): ~~The use~~ method as claimed in claim 9, wherein plastics, paints, printing inks, inorganic-organic composites and oxidic layer systems are colored.

Claim 11 (Currently Amended): ~~The use of~~ A composition comprising the 9-cyano-substituted perylene-3,4-dicarboxylic monoimides ~~monoimide~~ of the general formula I as claimed in claim 1 ~~or 2 as wherein said composition is a dispersants~~ dispersant, a pigment additives ~~additive~~ for organic pigments and an intermediates ~~intermediate~~ for the preparation of fluorescent dyes and pigment additives.

Claim 12 (Currently Amended): ~~The use of 9-cyano-substituted perylene-3,4-dicarboxylic monoimides of the general formula I as claimed in claim 1 or 2~~ A method for producing aqueous polymer dispersions and inkjet inks absorbing and/or emitting in the yellow region of the electromagnetic spectrum comprising utilizing the 9-cyano-substituted perylene-3,4-dicarboxylic monoimides of the general formula I as claimed in claim 1.

Claim 13 (Currently Amended): ~~The use of~~ A composition comprising the 9-cyano-substituted perylene-3,4-dicarboxylic monoimides ~~monoimide~~ of the general formula I as

claimed in claim 1 ~~or 2 as~~ wherein said composition is a coloring or color-correcting component in emissive and transfective color filters and in retroreflective components.

Claim 14 (Currently Amended): ~~The use of~~ A composition comprising the 9-cyano-substituted perylene-3,4-dicarboxylic ~~monoimides~~ monoimide of the general formula I as claimed in claim 1 ~~or 2 as~~ wherein said composition is a photoconductors photoconductor in electrophotography, as ~~an emitters~~ emitter in electroluminescence and chemiluminescence applications, as ~~an active components~~ component in fluorescence conversion, in bioluminescence arrays and in photovoltaics and ~~as a laser dye.~~